

REMARKS

Claims 2-6 and 14-18 have been cancelled. Claims 1, 7, 8, 13, 19-25, 27, 28 and 30-35 have been amended. New claims 36 and 37 have been added. Support for these amendments can be found in original claims 6, 15, 17 and 18 and page 1, line 32 and page 4, lines 8-13 and 16-18 of the present specification. No new matter is believed to have been added by these amendments.

Independent claim 1 has been amended to recite that a “suspension comprises a plurality of hollow particles in electrically conductive contact, said hollow particles comprise a substrate permeable and electrically conductive outer shell and entrapped therein a redox-reaction catalyzing enzyme catalyzing an enzymatic conversion of said substrate in said hollow particles thereby liberating electrons.”

ELECTION

The Office Action of April 13, 2010 requires a restriction between the following Groups:

Group I, including claims 1-26, drawn to a suspension comprising a polypeptide such as glucose oxidase entrapped in a hollow particle;

Group II, including claim 27, drawn to a battery comprising a polypeptide entrapped in a hollow particle in an electrolyte suspension;

Group III, including claim 28, drawn to a nanobattery comprising a polypeptide entrapped in a hollow particle in an electrolyte suspension in combination with a microchip;

Group IV, including claims 30-32, drawn to a fuel cell using a suspension with similar structure to Group I;

Group V, including claim 33, drawn to a method of generating power using a suspension with similar structure to Group I; and

Group VI, including claim 34, drawn to a method of preparing a suspension with a similar structure to Group I.

Applicant respectfully submits that claim 35, drawn to a method of preparing a suspension, was inadvertently omitted from Group VI, which should correctly correspond to both claims 34 and 35. Applicant also submits that new claims 36 and 37 are directed to a suspension and should correctly be included in Group I.

If Group I is elected, the Office Action requires an election of two species, one from each of the following two lists of species:

One species for claims 6-12 for a polymer that encapsulates the peptide selected from the group consisting of: conductive polymer, block-copolymer, polystyrene-polyisocyanopeptide block copolymer, PS-PIAT, block-copolymer with polymerized side groups, and PS-PIAT with polymerized side groups; and

One species for claims 22-25 for how the hollow particle is modified in the suspension from the group consisting of: embedded in a gel-like structure, embedded in a glucose solution, contacted to a matrix, and cross-linked to a matrix.

Group Restriction

Applicant hereby elects **with traverse, Group I**, including currently pending claims 1, 7-13, 19-26, 36, and 37.

Applicant respectfully traverses the restriction of Groups I-VI, on the basis that the claims, as currently amended, of each of Groups I-VI relate to a single general inventive concept under PCT Rule 13.1 because the claims all require a plurality of hollow particles in electrically conductive contact with substrate permeable and electrically conductive outer shells and a redox-reaction catalyzing enzyme entrapped therein catalyzing an enzymatic conversion of the substrate in the hollow particles thereby liberating electrons. Therefore, Applicant respectfully requests withdrawal of the restriction between Groups I-VI.

Species Restriction


Applicant hereby elects **with traverse**, the species directed to a **block-copolymer**, upon which claims 1, 7-13, 19-26, 36, and 37 read, and the species directed to hollow particles **embedded in a glucose solution**, upon which claims 1, 7-13, 19-26, 36, and 37 read.

Applicant respectfully traverses this restriction on the basis that the Office Action improperly fails to apply the Unity of Invention standard for national phase PCT applications. The Office Action fails to set forth reasons why the alleged species do not relate to a single general inventive concept under PCT Rule 13.1. At least for the reasons noted above with respect to the Group restrictions, the cited species do relate to a single general inventive concept.

Further, according to MPEP § 806.04(e), claims are never species. The identified species are directed to specific limitation of separate claims, none of which were identified as being mutually exclusive. Therefore, the species restriction is improper, and Applicant respectfully requests withdrawal of the species restriction.

Applicant makes these elections without prejudice to the later filing of a divisional application directed to the non-elected claims.

Respectfully submitted,
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